

CLAIMS

We claim:

- 1 1. A method for a standby router protocol (SRP) comprising:
 - 2 assigning a VLAN participating in an SRP to a membership in a VLAN domain,
 - 3 the VLAN domain having a master VLAN;
 - 4 establishing a default route for the membership of the VLAN domain as
 - 5 determined by a virtual router with which the master VLAN is associated; and
 - 6 routing traffic for the VLAN in accordance with the domain master VLAN's
 - 7 default route.
- 1 2. The method of claim 1, wherein establishing the default route is further
- 2 determined by a current master of the virtual router.
- 1 3. The method of claim 1, further comprising re-establishing the default route for
- 2 the membership of the VLAN domain as determined by a new master of the virtual
- 3 router elected in accordance with the SRP.
- 1 4. The method of claim 1, further comprising sending an SRP message from the
- 2 master VLAN to the virtual router on behalf of the membership of the VLAN domain.
- 1 5. The method of claim 1, wherein the SRP message is an Internet Protocol
- 2 packet datagram unit (PDU).

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1 6. The method of claim 5, wherein the PDU contains parameter data about a
2 status of an end-host in a member VLAN.

1 7. The method of claim 5, wherein the PDU contains parameter data about a
2 status of a member VLAN in the VLAN domain.

1 8. The method of claim 5, wherein the PDU contains parameter data about a
2 status of the VLAN domain.

1 9. The method of claim 1, wherein the member VLAN is a layer-2 subnet.

1 10. The method of claim 1, wherein the domain master VLAN is a layer-2 subnet.

1 11. A method for a standby router protocol (SRP) comprising:
2 assigning an end-host to a host-specific port of a first router supporting a
3 virtual router in an SRP;
4 establishing an initial default route for the end-host determined by a current
5 master router for the virtual router, the current master router elected in accordance
6 with the SRP;
7 routing traffic for the end-host in accordance with the initial default route; and
8 routing traffic for the end-host in accordance with a subsequent default route,
9 the subsequent default route determined by a new master router for the virtual router,
10 the new master router elected in accordance with the SRP.

1 12. The method of claim 11 wherein the first router is the current master router.

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1 13. The method of claim 11 wherein the first router is a backup router.

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13. The method of claim 11 wherein the first router is a backup router.